



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

86 10-12-00

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/319,202 06/02/99 SHIRASAKI 0 20-4576P

002292 IM62/1012
BIRCH STEWART KOLASCH & BIRCH
P O BOX 747
FALLS CHURCH VA 22040-0747

EXAMINER

GALLAGHER, J

ART UNIT PAPER NUMBER

1733

DATE MAILED: 10/12/00

OK Docketed CSS
1-12-01
amend

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

Applicant(s)

Examiner

Group Art Unit

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☐ Responsive to communication(s) filed on _____.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1 - 4 is/are pending in the application.
- ☐ Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1 - 4 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 11 9(a)-(d).
 - ☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____.
 - ☒ received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) (3) 486-7
- ☐ Interview Summary, PTO-413
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other FOREIGN REFERENCE

Office Action Summary

Art Unit: 1733

1. Applicants Preliminary Amendment, filed 02 June 1999, has been received and made of record.
2. The disclosure is objected to because of the following informalities: page 7 line 8 - correct the spelling of "or".

Appropriate correction is required.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the Japanese Nitto reference.

The NITTO reference discloses that it is known to melt/fusion bond two fluoropolymer parts/substrates together via a process wherein a heat shrinkable outer tubular part is placed ^{over} ~~and~~ around a second (apparently non or less shrinkable) inner tubular part, bonding being effected by a combination of the heat shrinking force applied by the outer part and the hot melt characteristics of both parts. (English Translation Abstract). Any differences which might possibly/conceivably exist between the envisioned, claimed invention and the teachings of this reference are held/seen NOT to constitute patentable differences.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1733

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4 are further rejected under 35 U.S.C. 103(a) as being unpatentable over the Japanese IND KK reference in view of any one of VOGDES et al or DAVIS et al or the NITTO reference.

1. The IND KK reference discloses that it is known to bond two resinous part/components/substrates having different (ie ^{LC} ~~layer~~ and smaller) heat shrinkage property together utilizing the difference in heat shrinkage characteristic to effect lamination, one part being positioned within/surrounded by ^{*} ~~he~~ other. (English Translation Abstract).

VOGDES et al (abstract, col. 1 lines 19-21 and 33, N.B. col. 2 lines 54-58, col. 3 lines 5-16 and 34-36) and DAVIS et al (abstract, col. 1 lines 5-8, col. 5 lines 51-68 (and N.B. line 62)) ^{both disclose} that fluorinated (eg. PTFE) copolymers (ie modified polymers) are known/appreciated by this art to be heat shrinkable, such that it would have been obvious to one of ordinary skill in this art to employ the ~~fluorinated~~ resin of any of the three secondary references in the process of the IND KK reference in place of the corresponding, analogous resin materials employed therein (^F ~~If~~ these fluorinated resins are not already encompassed within the teaching of the IND KK reference); mere substitution of one known heat shrinkable resin for another involved.

6. Claims 1-4 are still further rejected under 35 U.S.C. 103(a) as being unpatentable over the NITTO reference in view of either VOGDES et al or DAVIS et al, all of record above, the

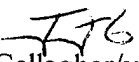
Art Unit: 1733

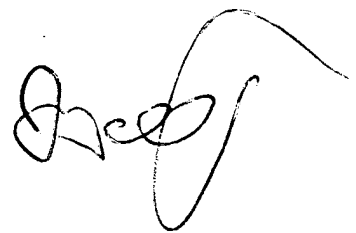
reasoning being essentially the same as/analogous to that set forth at the end of paragraph 5, above.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. J. GALLAGHER whose telephone number is (703) 308-1971. The examiner can normally be reached on M-F from approximately 8:30 A.M. to 5: P.M. The examiner can also be reached on alternate N/A.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MICHAEL BALL, can be reached on (703) 308-2058. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3599.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661/0662.


J. Gallagher/vr
10-11-00
10-11-00


JOHN J. GALLAGHER
PRIMARY EXAMINER
ART UNIT 131 / 1733

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.